

Appl. No. 10/802,339
Response Dated May 16, 2006
Reply to Office action of February 22, 2005

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Claims Listing

1. (currently amended) A thermistor probe assembly, comprising:

a thermistor element;

a positioning device for positioning the thermistor element at a pre-determined location within the assembly; and

a moisture proof shield disposed to encapsulate the thermistor element and the positioning device, wherein the moisture proof shield comprises a surface energy enhancing material and a molding material disposed over the thermistor element and the positioning device.
2. (original) The assembly of claim 1, wherein the thermistor element has a cross-sectional profile selected from the group consisting of a square-shaped profile and a circular-shaped profile.
3. (original) The assembly of claim 1, wherein the thermistor element comprises a ceramic material.
4. (original) The assembly of claim 1, wherein the positioning device comprises one or more materials selected from the group consisting of polyvinyl chloride and polybutylene terephthalate.
5. (original) The assembly of claim 1, wherein the pre-determined location is at a central location within the thermistor probe assembly.
6. (original) The assembly of claim 1, further comprising at least two lead wires extending from the thermistor element.
7. (original) The assembly of claim 6, further comprising a conductor material coupled to the thermistor element through the at least two lead wires.
8. (original) The assembly of claim 7, wherein the conductor material comprises brass.

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9. (original) The assembly of claim 7, further comprising an insulating material disposed over the conductor material.
10. (canceled previously).
11. (previously presented) The assembly of claim 7, wherein the surface energy enhancing material is disposed over the conductor material.
12. (original) The assembly of claim 11, wherein the surface energy enhancing material comprises a material selected from the group consisting of Loctite P 770, Loctite P 7452, Loctite P 34589, and P cyclohexane.
13. (currently canceled).
14. (currently amended) The assembly of claim [13]7, further comprising an insulating material disposed over the conductor material, wherein the molding material disposed over the thermistor element and the positioning device is compatible with the insulating material disposed over the conductor material.
15. (previously presented) The assembly of claim 7, wherein the lead wires are soldered to the conductor material.
16. (previously presented) The assembly of claim 7, wherein the lead wires are spot-welded to the conductor material.
17. (original) The assembly of claim 6, wherein the lead wires comprise steel.
18. (original) The assembly of claim 6, wherein the lead wires comprise copper.
19. (canceled previously).
20. (canceled previously).
21. (canceled previously).
22. (canceled previously).

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23. (canceled previously).
24. (canceled previously).
25. (canceled previously).
26. (canceled previously).
27. (canceled previously).
28. (canceled previously).
29. (canceled previously).
30. (canceled previously).
31. (canceled previously).
32. (previously presented) The assembly of claim 1, wherein the positioning device comprises:
 - a cavity extending there through and adapted for receiving a thermistor element;
 - at least three self-centering lobes adapted to position the thermistor element within the thermistor probe assembly; and
 - a relief groove positioned between two of the at least three self-centering lobes.
33. (previously presented) The assembly of claim 32, wherein said at least three self-centering lobes are externally directed.
34. (canceled previously).
35. (canceled previously).